

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

DAVID A. COLE COMMISSIONER

April 22, 2004 Subject: Statewide Mulch Project No's 11001.00,110

Project No's 11001.00,11002.00,11006.00, 11007.00,11010.00,11011.00,11013.00, 11015.00,11018.00,11019.00 & 11021.00

Bid Amendment No. 1

### Dear Sir/Ms.:

Please make the following changes to your bid package:

Delete "Special Provision Section 310 Plant Mixed Recycled Asphalt Pavement" for **Edmunds Area, Pin 11007.00**, one page, dated March 1, 2004.

Delete "Special Provision Division 400 Pavements" four pages total, dated November 2003, and replace with the attached "Special Provision Division 400 Pavements" four pages total, dated April 16, 2004.

On the "Cost Computation Chart" for **Edmunds Area Pin 11007.00** delete in its entirety pay Item 310.15, 12000 Cubic Yards, Unit Price = PMRAP Place Cost.

Make this change in pen and ink.

Consider these changes prior to submitting your bid on April 28, 2004.

Scott Bickford

Contracts & Specifications Engineer

## SPECIAL PROVISIONS DIVISION 400 PAVEMENTS

<u>Description.</u> This work shall consist of supplying the aggregate and bitumen, trucking, and producing Maintenance Resurfacing HMA (Hot Mix Asphalt) for use as directed by the Maintenance Division. The mixture shall be placed as directed by the Department.

#### **MATERIALS**

<u>HMA MIX TYPE.</u> The Hot Mix Asphalt Pavement produced under this contract item shall meet the requirements of a MaineDOT approved 9.5 mm Fine job mix formula.

<u>Bituminous Material.</u> The bituminous material shall meet the requirement of the State of Maine, Department of Transportation, Standard Highway Specifications, Revision of December 2002. The asphalt shall meet the grading requirements of PG 64-28 or PG 64-22.

Aggregate. Aggregate shall consist of clean, tough durable fragments free from an excess of flat, elongated, soft or disintegrated particles. It shall be processed from a gravel or stone source in such a manner that a uniformly graded stockpile of sufficient quantity for at least on day's normal production will be available at all times. Production of the mix will come from prepared stockpiles.

Materials. Materials shall meet the following Consensus Quality requirements:

The Composite Blend shall have a Micro-Deval value of 18.0 or less as determined by AASHTO TP-58-99. In the event of a failure, the Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), shall be run before rejection of the material. Material with a value of 30 or more may be accepted. The fine aggregate shall not exceed absorption of 3% by weight as determined by AASHTO T84.

The Sand Equivalent value shall be a minimum of 45 as determined by AASHTO T304. The uncompacted Void Content of Fine Aggregate shall be a minimum of 40 as determined by AASHTO T304.

<u>Composition of Mixtures</u> The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF). The Contractor may use a maximum of 15% reclaimed asphalt pavement (RAP).

The Contractor shall submit for Department approval a JMF to the Central Laboratory in Bangor. The JMF shall establish a single percentage of aggregate passing each required sieve

size within the limits shown in Table A. The JMF shall state the source, gradation, and percentage to be use of each portion of the aggregate and mineral filler if required. It shall also state the proposed PGAB content, the name and location of the refiner, the supplier, the source of PGAB submitted for approval, the type of PGAB modification if applicable, and the location of the terminal if applicable. All mixes utilized in this contract work shall be from a single Hot Mix Asphalt source to minimize the testing requirements, unless otherwise authorized by the Department.

The mix design air void target is 4.0 % at 50 gyrations for all HMA mixes placed under this contract.

### CONSTRUCTION REQUIREMENTS

<u>Weather Limitations</u>. Weather conditions shall be satisfactory for the safety of the operation and shall be carried on only when the atmospheric temperature is above 50° F and pavement temperature is above 40° F. Placement of HMA will not be allowed on wet surfaces.

<u>Gradation Testing.</u> Control of the mix production will be maintained by requiring that the running average of three consecutive **washed gradation tests** fall within the required gradation limits outlined in Table 7.

The first gradation will be taken prior to production, the second taken during the first day of production. The final test will be taken when 50% of contract has been completed. A copy of the test result will be made available to the Department, or authorized representative, before the next working day after the test is required.... At the same time, a copy will be sent by the Contractor to the Maintenance and Operations Bureau, 16 State House Station, Augusta, Maine 04333-0016 to the attention of the Hot Maintenance Mulch Manager. Blank forms will be available through the Division Engineer or the authorized representative upon request. The Division Engineer or authorized representative may require that a sample be procured and tested by State personnel prior to the start of operations.

These tests in no way relieve the Contractor from control testing to maintain the quality and consistency of the product. Nothing in this section prevents the Department of Transportation's personnel from obtaining additional samples of products to assure the acceptability of the product.

Acceptance - Method C The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO T168 Sampling Bituminous Paving Mixtures, and the MDOT/ACM Sampling Policy. The Department will take the samples randomly within each sublot.

For hot mix asphalt items designated as Method C, the total quantity of mix represented in the Contract shall constitute a Lot. Each Lot shall be divided into a minimum of **four** (4) sublots.

The maximum sublot size shall be **2500 ton**. Each sublot sample will be taken from the paver hopper, or the truck body, per pay item. The samples will then be transported by the Contractor to the designated MDOT Laboratory as directed by MDOT. All samples will be placed in approved transport containers to be provided by the Department, unless otherwise directed by the Department. The mix will be tested for gradation and PGAB content.

Disputes will not be allowed. If the mix is within the tolerances listed in Table 7 - Method C Acceptance Limits, the Department will pay the contract unit price. Target values shall be as specified in the JMF.

TABLE 7: METHOD C ACCEPTANCE LIMITS

Property	USL and LSL
	Method C
Percent Passing No. 4 and larger sieves	Target ± 7
Percent Passing No. 8 to No. 16 sieves	Target ± 5
Percent Passing No. 30	Target ± 4
Percent Passing No. 50 to No. 200 sieve	Target ± 3
PGAB Content	Target $\pm 0.5$

If the test results for each sublot outside the Table 7 property limits the following deductions in Table 7b shall apply to the HMA quantity represented by the test. A second consecutive test outside acceptance criteria shall result in cessation of mix production.

TABLE 7b

PGAB Content	-5%
# 8 sieve	-2%
# 50 sieve	-1%
# 200 sieve	-2%

The Department will use Table 7b for calculating pay factors for gradation and PGAB content.

Onsite certified QC personnel shall not be required.

<u>Hot Mix Asphalt Plant Requirements.</u> All Bituminous mixing plants shall conform to the Standard Specifications, Revision of December 2002.

<u>Mixing Operations</u>. The processing of the aggregate, handling of bitumen, drying of aggregate, and mixing shall conform with acceptable practices of the paving industry. The Contractor's plant shall supply a minimum of 90 ton/hour at the paver.

The Contractor shall provide silicon additive when requested by the Division Engineer or authorized representative.

The Contractor shall provide an approved release agent, and application equipment, to safely apply a sufficient coating of release agent to prevent the HMA mixture from adhering to the truck beds.

Traffic Control. The State will provide all necessary traffic control and sweeping operations.

<u>Placing Operations.</u> The Contractor shall be responsible for the actual placing and rolling operations. Placing operations shall conform to acceptable paving practices. Mixture produced under this contract shall be placed on the roadway with an approved self-propelled bituminous finishing machine designed for highway paving. Immediately after the material is spread, a sufficient number of 7 - 10 ton, 2-axle steel wheel and/or rubber tired rollers, as determined by the Division Engineer or authorized representative, shall be utilized to properly compact it.

The Contractor shall provide sufficient personnel at the paver to assure placement of the pavement in an orderly, safe, and efficient manner, and so as to assure a quality mat and proper overall yield.

Every effort shall be made to close exposed longitudinal joints within two (2) working days, and on weekends and holidays.

In the event the Contractor's placing equipment breaks down, the State may place the mixture in transit if State equipment is readily available and if it is a type which can perform the work satisfactorily. This cost of placing will be borne by the Contractor.

Onsite certified QC personnel shall not be required.

<u>Dust Control.</u> The Contractor is responsible for dust control on the access roads for the bituminous plant as described in Section 637 of the Standard Highway Specifications, Revision of December 2002. This work shall be incidental to the contract.

Method of Measurement. Maintenance Surface Treatment (HMA) will be measured by the ton, at the contract price, according to delivery slips. Material not placed and compacted satisfactorily due to Contractor's equipment failure will not be measured for payment. The delivery slips shall conform to the requirements of the Standard Highway Specifications, Revision of December 2002. Cover slips will be required to be delivered on the next working day after each paying day. Listed will be the Item number, date and quantity.

<u>Basis of Payment.</u> Maintenance Surface Treatment (HMA) will be paid for at the contract unit price per ton. Such payment shall be full compensation for obtaining and furnishing all aggregate and bituminous material including tack; for processing, heating, mixing, weighing, trucking, placing, and rolling; for furnishing all labor, equipment, tools and all incidentals necessary to complete the work.

When work is to be accepted under Method C provisions, the Department will make a pay adjustment for quality below the minimum acceptable level, as specified on Table 7b.

Payment will be made under:

Pay Item
Pay Unit

461.210 Maintenance Surface Treatment (HMA), 9.5 mm
Ton